- unavoidable project impacts. Consistent use of the site by endangered species, or documented endangered species habitat on-site shall be preserved on-site.
- 3.4.8 Remove invasive exotics from all Natural Resources of Regional Significance and associated buffer areas. Require the continued regular and periodic maintenance of areas that have had invasive exotics removed.
- 3.4.9 Required maintenance shall insure that re-establishment of the invasive exotic does not occur.

#### Strategic Regional Goal

3.8 Enhance and preserve natural system values of South Florida's shorelines, estuaries, benthic communities, fisheries, and associated habitats, including but not limited to, Florida Bay, Biscayne Bay and the coral reef tract.

#### **Regional Policies**

- 3.8.1 Enhance and preserve natural shoreline characteristics through requirements resulting from the review of proposed projects and in the implementation of ICE, including but not limited to, mangroves, beaches and dunes through prohibition of structural shoreline stabilization methods except to protect existing navigation channels, maintain reasonable riparian access, or allow an activity in the public interest as determined by applicable state and federal permitting criteria.
- 3.8.2 Enhance and preserve benthic communities, including but not limited to seagrass and shellfish beds, and coral habitats, by allowing only that dredge and fill activity, artificial shading of habitat areas, or destruction from boats that is the least amount practicable, and by encouraging permanent mooring facilities. Dredge and fill activities may occur on submerged lands in the Florida Keys only as permitted by the Monroe County Land Development Regulations. It must be demonstrated pursuant to the review of the proposed project features that the activities included in the proposed project do not cause permanent, adverse natural system impacts.
- 3.8.3 As a result of proposed project reviews, include conditions that result in a project that enhances and preserves marine and estuarine water quality by:
  - a) improving the timing and quality of freshwater inflows;
  - b) reducing turbidity, nutrient loading and bacterial loading from wastewater facilities and vessels;
  - c) reducing the number of improperly maintained stormwater systems; and
  - d) requiring port facilities and marinas to implement hazardous materials spill plans.
- 3.8.4 Enhance and preserve commercial and sports fisheries through monitoring, research, best management practices for fish harvesting and protection of nursery habitat and include the resulting information in educational programs throughout the region. Identified nursery habitat shall be protected through the inclusion of suitable habitat protective features including, but not limited to:

Ms. Cherie Trainor March 1, 2000 Page 4

- a) avoidance of project impacts within habitat area;
- b) replacement of habitat area impacted by proposed project; or
- c) improvement of remaining habitat area within remainder of proposed project area.
- 3.8.5 Enhance and preserve habitat for endangered and threatened marine species by the preservation of identified endangered species habitat and populations. For threatened species or species of critical concern, on-site preservation will be required unless it is demonstrated that off-site mitigation will not adversely impact the viability or number of individuals of the species.

Thank you for the opportunity to comment. We would appreciate being kept informed on the progress of this project. Please do not hesitate to call if you have any questions or comments.

OHICC, CA

Eric Silva Senior Planner

ES/ms

cc: Guillermo E. Olmedillo, Miami-Dade County Jean Evoy, Miami-Dade County DERM James C. Duck, USACE



# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Southeast Regional Office 9721 Executive Center Drive North St. Petersburg, FL 33702 (727) 570-5312, FAX 570-5517

MAR 1 3 2000

F/SER3:JBM

Mr. James C. Duck Chief, Planning Division Jacksonville District Corps of Engineers P.O. Box 4970 Jacksonville, Florida 32232-0019

Dear Mr. Duck:

This responds to your letter dated March 1, 2000 concerning the impacts to endangered and threatened species or their critical habitat as a result of the proposed renourishment at Haulover Beach Park, Dade County, Florida. To evaluate the environmental effects as a result of the proposed project, you have requested consultation pursuant to section 7 of the Endangered Species Act of 1973 (ESA), as amended.

We concur with your determination that this type of activity is covered under the biological opinion (BO) on hopper dredging along the Southeast Atlantic Coast, issued by the National Marine Fisheries Service (NMFS) in 1995, and amended on September 25, 1997. The BOs analyzed the effects of hopper dredging in channels and borrow areas and concluded that their use would not jeopardize the continued existence of species of sea turtles protected by the ESA. NMFS believes the regional BOs adequately address the work being proposed by this project.

This concludes consultation responsibilities under section 7 of the ESA. Consultation should be reinitiated if new information reveals impacts of the identified activity that may affect listed species or their critical habitat, a new species is listed, the identified activity is subsequently modified or critical habitat determined that may be affected by the identified activity.

If you have any questions or concerns, please contact Eric Hawk, fishery biologist, at the number listed above.

Sincerely,

William T. Hogarth, Ph.D. Regional Administrator

charles a . Oranet

F/PR2, F/SER4 cc:

1514-22 f.1.

O:\SECTION7\INFORMAL\HAULOVER.JAX





#### **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4 WATER MANAGEMENT DIVISION SOUTH FLORIDA OFFICE

SOUTH FLORIDA OFFICE 400 NORTH CONGRESS AVE., SUITE 120 WEST PALM BEACH, FLORIDA 33401

March 2, 2000

Mr. James C. Duck Chief, Planning Division U.S. Army Corps of Engineers Planning Division P.O. Box 4970 Jacksonville, FL 32232-0019

Dear Mr. Duck:

This is in response to your request for comments on a proposed project to renourish the Haulover Beach Park segment of the Dade County Beach Erosion Control and Hurricane Protection Project, Dade County, Florida. Our general concern with beach nourishment projects is that they are attempts to stabilize an inherently unstable coastal system. Also, destruction of the primary dune system by development, construction of jetties and seawalls, and construction and maintenance of inlets have upset the dynamic balance of coastal sediments. It is our opinion that the remediation of causes of the disruption to natural movements of coastal sediments should be addressed and compared to the perceived need to "hurricane proof" a shoreline through a massive dredging and disposal project.

Your letter provides a general discussion of the proposal project and alternatives. It is our understanding that greater detail of the project will be presented in the forthcoming Environmental Assessment (EA). We will evaluate the EA for conformance with the Section 404(b)(1) Guidelines which include avoidance and minimization of impacts to aquatic resources, and compensation for unavoidable losses. We recommend that the EA thoroughly address the need for this project, and include a detailed analysis of alternatives and the impacts of the project on aquatic resources at the borrow site and disposal site.

Thank you for the opportunity to provide these preliminary comments on the proposed project. If you have any questions, please contact Bill Kruczynski, of my staff, at (305) 743-0537.

Sincerely,

Richard Harvey, Director

South Florida Office



# ReefKeeper® International

**PHONE** 

(305)358-4600 (305)358-3030

E-MAIL

reefkeeper@reefkeeper.org

**WEB SITE** 

http://www.reefkeeper.org

**OPERATIONS CENTER** 

PMB 162 2809 Bird Avenue Miami, FL 33133

**LATIN AMERICA &** CARIBBEAN REGION

PMB 321 703 Belt Road, Ramey Aguadilla, PR 00603-1333 March 2, 2000 **Operations Center** 

James C. Duck Chief, Planning Division Jacksonville District Corps Of Engineers P.O. Box 4970 Jacksonville, FL 32232-0019

> RE: Renourishment at Haulover Beach Park

Dear Mr. Duck:

In response to the public notice of the preparation of an Environmental Assessment (EA) for the renourishment of Haulover Beach Park as part of the Dade County Beach Erosion Control and Hurricane Protection Project, ReefKeeper International requests that the Environmental Assessment (EA) for this project include an evaluation of the following issues:

- locations of coral reefs and hardbottom communities:
- dredging buffer zones:
- risks during night dredging;
- use of reef protection areas:
- best pipeline placement;
- shape of borrow area:
- coral reef specific water quality requirements;
- use of turbidity barriers and turbidity buffer zones;
- sand quality and fines content;
- use of upland sand sources:
- use of inlet sand source:
- monitoring requirements:
- mitigation requirements; and
- reduction in scope of project.

ReefKeeper International, founded in 1989, is a non-profit organization dedicated to the protection of coral reefs and their marine life.

Survey Required - Coral Reefs and Hardbottoms Present

The seafloor near the proposed borrow areas and adjacent to the beach to be renourished contains significant coral reefs and hardbottom communities. Corals can grow as slowly as 1/5 to 1 millimeter per year (McConnaughey, 1983), with a knee-high coral head possibly being hundreds of years old. These characteristically slow growth rates simply mean that scleractinian reef-building corals are not a renewable resource on a biological time scale but rather should be viewed on a geological time scale.

Therefore, corals should not be put at risk of destruction from dredging and beach renourishment activities. ReefKeeper International requests that mapping of all coral reefs and hardbottom areas near the proposed project area be conducted to determine the location and extent of these important features. This mapping should adequately characterize and quantify the bottom cover in the specific locations.

# Use of Dredging Buffer Zones

Past experience shows that physical dredging damage does occur during beach renourishments. In fact, coral reefs are most damaged by dredging. Poorly planned and implemented dredging operations have caused the demise of many reefs. Straughan (1972) condemned dredging for the destruction of some Florida Keys reefs. Poor planning at a beach renourishment dredging project off Hallandale, Florida resulted in reef burial.

Blair and Flynn (1988) documented the destruction by direct dredge impact of 2 acres of coral reef at a previous beach renourishment project in the Sunny Isles area. In 1988, two acres of natural coral reef were damaged or destroyed by a dredge during the rebuilding of Miami's Sunny Isles Beach. The damage was depicted as some of the most severe reef destruction in modern South Florida history, according to Carlos Espinosa, then Chief of the Water Management Division of the county's Department of Environmental Resources Management.

The dredging company had orders to draw sand from a strip of sea bottom between two reefs parallel to shore. Round the clock, seven days a week, a huge ship floated along the narrow corridor, sucking up sand.

Even though the dredging zone was established with dredging barge paths no closer than 200 feet to the nearest coral areas, this did not prevent the damage. The dredge strayed off its charted course and plowed as much as 150 feet into coral habitat without the dredge operators' knowledge of it. The dredge was pulled over the reef numerous times, in a path of destruction in some places 350 feet wide (Blair and Flynn, 1988). Even when chunks of broken coral began spewing out of the dredge suction pipe, the barge operators assumed it was relic material buried under the sand pocket they were working.

Errors and accidents do occur. They have in the past. And they will happen again if proper safeguards are not in place. Therefore, ReefKeeper International requests that the EA include an evaluation of adequate and precautionary dredging buffer zones around coral ecosystems.

# Risks of Impact Due to Night Dredging Operations

For economic and time constraint reasons, dredging is often conducted around the clock for beach renourishment projects. Past projects have utilized lighted buoys that are often placed along the hardbottom areas to mark a dredge's path. However, these lighted buoys do not prevent the dredge from entering the coral areas or from damaging them. The lighted buoys give only a visual demarcation of the hardbottom.

ReefKeeper International requests that the EA assess the probability that the dredge will pass through a buoy line or other dredge path markers during nighttime dredging

operations and quantify the damage that would occur. If the dredge were to stray from its path, it would inevitably damage the surrounding coral communities before being able to turn.

ReefKeeper International further requests that the EA consider the risks of night dredging and the advantages of prohibiting this activity. The EA should quantify the probability of impact to the reefs as well as the probability of damage from nighttime dredging as opposed to daytime dredging.

# Reef Protection Zones Should be Considered

Dredging is not the only activity conducted during beach renourishments that has the potential to adversely impact coral reefs and hardbottom communities. Construction vessels can run aground or scrape corals as they maneuver to, from, and around the dredge site. Heavy anchors can destroy corals on which they land.

Therefore, ReefKeeper International requests that the EA consider the implementation of "reef protection zones" so that reefs and hardbottom habitats are further protected from non-dredging activities such as construction vessel movement, anchoring, and spudding. All of these non-dredging activities should be prohibited in reef protection zones to protect these fragile resources.

# Potential Habitat Destruction Due to Pipeline Placement

The presence of the pipeline used to move the sand on top of corals can damage, if not kill, these fragile marine organisms. Direct physical placement can crush corals and other reef organisms. The continued presence of the pipeline will shade corals, which are dependent upon sunlight for their survival.

ReefKeeper International requests that the EA include an evaluation of the potential adverse impacts by the pipeline used to move the sand. Quantification and a quality evaluation of any hardbottom habitat that would be covered should be included. If at all physically possible, damage should be avoided by routing the pipeline around corals -- or by using sand from a different source.

# Risks Due to Shape of Borrow Site

Designs necessitating sharp turns within the borrow area may cause the dredge to stray from its path and onto the coral reefs and hardbottoms. The feasibility of the dredge being able to move out of the borrow area before turning to start a new dredge pass so it can make its re-entry turns in a wider, safer area should be fully investigated.

ReefKeeper International requests that the EA include an evaluation of the risks associated with the shape of the proposed borrow areas. If possible, the shapes should be rectangular with adequate area at each end of the borrow area to allow for maneuvering of the dredge vessel.

### Coral-Specific Water Quality Requirements

Hard corals, in particular, are susceptible to the effects of elevated levels of turbidity due to dredging (Dodge et al., 1974; Loya, 1976; Dodge and Vaisnys, 1977; Bak, 1978;

Lasker, 1980; Marszalek, 1981; Rogers, 1983). High turbidity resulting from fine suspended particles generated by dredging decreases the amount of light -- a vital source of energy -- available to corals for the photosynthetic fixation of calcium carbonate (Johannes, 1975), thus reducing coral calcification (growth) rates (Lasker, 1980).

Turbidity also clogs the filter feeding mechanisms of coral polyps and causes continual energy losses by the necessity of continuous shedding of the protective mucus layer secreted by coral polyps (Lasker, 1980; Dallmayer et al., 1982).

Silt created by dredging remains in the local area for long periods and is resuspended during storms. Natural resuspension can also be compounded by the presence of silt fill discharged at the dredge site.

Moreover, sediments excavated by dredging are often anaerobic and bind up available dissolved oxygen. This forces reef organisms to increase respiration to remove silt, further lowering dissolved oxygen levels. Coupled with this increased respiration is reduced photosynthesis and oxygen production due to lowered light levels.

The usual result of chronic sedimentation is stressed corals susceptible to disease. The quantity of turbidity and the length of time required for exertion of its maximum stress effect is not known, but corals that are stressed expel essential symbiotic zooxanthellae and take on a pallid appearance prior to mortality (Goreau, 1964; Rogers, 1979; Glynn et al., 1984). Generally, mortality ensues within six weeks of such reactions.

Therefore, ReefKeeper International requests that the EA incorporate criteria specifically responsive to coral reef water quality requirements. Consideration of water quality requirements for corals will help prevent "unforeseen" negative impacts and will allow for the establishment of water quality criteria that are appropriate for the ecosystem.

# **Turbidity Buffer Zones and Turbidity Barriers**

Poor planning at a beach renourishment dredging project off Hallandale, Florida resulted in reef burial and water quality problems (Courtenay et. al. 1974). The 1990 beach renourishment project at Bal Harbour resulted in catastrophic sedimentation burial of coral reef areas near the dredging site (Blair et. al., 1990). Similar destruction may occur at the proposed dredging site.

Given the history of adverse turbidity impacts during dredging projects and the severe damage to corals that results from poor water quality, ReefKeeper International requests that the EA evaluate the use of turbidity buffer zones and turbidity barriers. These measures should be incorporated into the project to minimize and monitor turbidity loads over the coral reefs adjacent to the dredging site, and to prevent fatal turbidity impacts to those coral reefs. Researchers have recommended buffer zones of up to half-a-nautical-mile to protect coral reefs from dredging siltation (Griffin 1974; Courtenay et al. 1974).

## Adequate Determination of Sand Quality

The presence of too much fine-grained sand and silt in the borrow areas can have devastating effects on corals. During the dredging operation, this material will become

suspended in the water column, creating unacceptable turbidity levels. Once on this beach, these "fines" will be easily washed away and redeposit on the coral reefs and hardbottom communities.

Therefore, ReefKeeper International requests that the EA include sufficient testing of the borrow sand to ensure that the sand does not contain too much "fines". Representative testing in a number of locations and depths within the borrow areas should be conducted.

# Availability of Upland Sand Sources for this Project

Upland sources of sand in Florida can provide medium to fine grained quartz sand. Upland sources have the benefits of not requiring the separation and disposal of larger-sized particles, reducing overfill and improving turbidity conditions at the deposition site due to its lower silt content, eliminating any environmental risks and impacts to offshore coral reef areas from dredging, and eliminating the need to mitigate.

ReefKeeper International requests that the EA fully evaluate the availability and economic feasibility of sand from upland sources. There must be a full presentation, comparative analysis and accounting that equitably compares the use of these upland sand sources with the use of the high-risk offshore borrow areas. Such a comparison must clearly show and take into account all the operational savings attributable to the use of the upland sand source -- such as no mitigation cost and no offshore rock disposal cost -- as well as the added values accruing from higher quality sand, eliminated risks to reefs, and more.

# Potential Use of Inlet Sand to Supplement Renourishment

The proposed project location is near the Bakers Haulover Inlet. Inlets of this type often require periodic maintenance dredging to maintain depths necessary for navigation. Since these inlets are sand depositional environments and are often subjected to high water movement and dredging activities, they are generally not dominated by hardbottom communities. Currently, sand removed during maintenance dredging is usually dumped offshore.

ReefKeeper International requests that the EA include an evaluation of the potential of using maintenance dredged sand to supplement the proposed beach renourishment. Although there may be insufficient quantities to complete the entire project, the use of inlet sand may greatly reduce the size of the borrow areas required for this project.

### Monitoring Requirements Must be Evaluated

Damage to coral reefs and hardbottom communities can only be detected if an adequate monitoring program is in place. Monitoring must be conducted before any dredging activities are initiated to determine the "baseline" conditions. Monitoring during the dredging is critical to identifying problems and preventing additional damage. Monitoring after the dredging is complete is important in determining long-term impacts of the project.

ReefKeeper International requests that the EA evaluate monitoring requirements for the coral reefs and hardbottom communities. Monitoring should be conducted before, during, and after the project to adequately determine the impacts.

# **Determination of Mitigation Requirements**

One cannot assume that any dredging project will be conducted perfectly as planned and without a hitch. It is likely that the current nearshore area contains corals that will be covered during the renourishment activities. It is also likely that some corals will be adversely impacted during the dredging.

Therefore, ReefKeeper International requests that an adequate evaluation of possible mitigation measures to compensate for errors, unforeseen circumstances, and lost habitat be included in the EA prior to the initiation of the project. ReefKeeper International requests that this include an evaluation of the feasibility of relocating all coral colonies that may be covered by the pipeline or are within buffer zone areas. To mitigate for stony coral mortality from coral relocation, and for general destruction of benthic biota, any proposed concrete and limestone modules should be deployed on more than a 1-to-1 basis at locations where the deployment would provide new hard substrate for the settlement of new corals and other benthic organisms.

# Potential Reduction in Scope of Project

The project as proposed calls for the placement of 114,000 cubic yards of material at Haulover Beach Park, extending the beach hundreds of feet into the ocean. The vast extent of the renourishment from the current shoreline only increases the adverse impacts to marine life from this project.

Therefore, ReefKeeper International requests that the EA include an evaluation of a potential reduction in the size of the project. A project smaller in width may necessitate more frequent renourishing and the potential costs and benefits of this should be examined. The potential use of sand dredged from nearby inlets may make smaller, more frequent renourishment activities both economically and environmentally more viable than the current proposed project.

Thank you very much for your consideration, and anticipated support, of our requests for the inclusion in the Environmental Assessment of measures to protect the fragile coral reefs and hardbottom communities of Miami-Dade County, Florida.

Sincerely,

Diane M. Rielinger Senior Policy Associate ReefKeeper International

Draem Rieby

References

Bak, R.P. M. 1978. Lethal and sublethal effects of dredging on reef corals. Mar. Poll. Bull. 9:14-16.

- Blair S. and B. Flynn. 1988. Sunny Isles Beach Restoration Project: Mechanical Damage to the Reefs Adjacent to the Borrow Area. Metro-Dade DERM Technical Report 88-14. 17pp.
- Blair S. B. Flynn, T. McIntosh, L. Hefty. 1990. Environmental Impacts of the 1990 Bal Harbor Beach Renourishment Project: Mechanical and Sedimentation Impact on Hard-Bottom Areas Adjacent to the Borrow Area. Metro-Dade DERM Technical Report 90-15.
- Courtenay, W.R., D.J. Herrema, M.J. Thompson, W.P. Azzinaro, and J. van Montfrans. 1974. Ecological monitoring of beach erosion control projects, Broward County, Florida, and adjacent areas. U.S. Army Corps of Engineers, Coastal Engineering Research Center, Fort Belvoir, Va. Tech. Memo. 41. 88pp
- Dallmayer, D.G., J.W. Porter, J.J. Smith. 1982. Effects of particulate peat on behavior and physiological of Jamaican reef-building coral <u>Monstreata annularis</u>. Mar. Biol. 68:229-233.
- Dodge, R.E., R.C. Aller, and J. Thomson. 1974. Coral growth related to resuspension of bottom sediments. Nature 247(5442):574-577.
- Dodge, R.E., and J.R. Vaisnys. 1977. Coral populations and growth patterns responses to sedimentation and turbidity associated with dredging. J. Mar. Res. 35(4):715-730.
- Glynn, P.W., L.S. Howard, E. Corcoran and A.D. Freay. 1984. The occurrence and toxicity of herbicides in reef building corals. Mar. Poll. Bull. 15:370-374.
- Goreau, T.F. 1964. Mass expulsion of zooxanthellae from Jamaican reef communities after hurricane Flora. Science 145:383-386.
- Griffin, G. 1974. Case history of a typical dredge-fill project in the northern Florida Keys effects on water clarity, sedimentation rates and biota. Publ. 33, Harbor Branch Foundation. 67pp
- Johannes, R.E. 1975. Pollution and degradation of coral reef communities. Pages 13-51 in R.E. Johannes and E.J. Ferguson Wood, eds. Tropical marine pollution. Elsevier Scientific Publishing Co., Amsterdam, Netherlands.
- Lasker, H.R. 1980. Sediment rejection by reef corals: The roles of behavior and morphology in <u>Montastrea cavernosa</u> (Linnaeus). J. exp. mar. Biol. Ecol. 47:77-87.
- Loya, Y. 1976. Effect of water turbidity and sedimentation on the community structure of Puerto Rico corals. Bull. mar. Sci. 26:450-466.
- Marszalek, D.S. 1981. Impact of dredging on a subtropical reef communit, southeast Florida, U.S.A. Proc. 4th Intern. Coral Reef Symp. Manila 1:147-153.

- Rogers, C.S. 1979. The effect of shading on coral reef structure and function. J. Exp. Mar. Biol. Ecol. 41:269-288.
- Rogers, C.S. 1983. Sublethal and lethal effects of sediments applied to common Caribbean reef corals in the field. Mar. Poll. Bull. 14:378-382.

Planning Division Environmental Branch

MAR 0 1 2000

Mr. Charles Oravetz Chief, Protected Species Management Branch National Marine Fisheries Service 9721 Executive Center Drive, North St. Petersburg, Florida 33702

Dear Mr. Oravetz:

This is in reference to the Dade County Beach Erosion Control and Hurricane Protection Project and the proposed renourishment at Haulover Beach Park. For a description of the proposed action, please refer to the enclosed public notice dated February 3, 2000. Also reference the Regional Biological Opinion (RBO) on hopper dredging along the Southeast Atlantic Coast as amended on September 25, 1997.

The U.S. Army Corps of Engineers has determined that the proposed renourishment activities are covered by the referenced RBO and no further consultation with the National Marine Fisheries Service under Section 7 of the Endangered Species Act is required at this time. Your concurrence on this determination is requested.

If you have any questions or need any additional information, please contact Mr. Mike Dupes at 904-232-1689.

Sincerely,

James C. Duck Chief, Planning Division

Enclosure

bcc:

CESAJ-DP-I (Stevens)

February 29, 2000

Mr. James Duck, Chief Planning Division Department of the Army Jacksonville District Corps of Engineers P.O. Box 4970 Jacksonville, FL 32232-0019



SUBJECT: Renourishment At Haulover Beach Park, a Miami-Dade County Beach Erosion Control And Hurricane Protection Project

REFERENCE: REQUEST FOR A PUBLIC HEARING

attachments: PETITIONS FOR BEACH RENOURISHMENT (89 pages, 442 Signatures)

Dear Mr. Duck:

Please accept this letter as our request for a public hearing. To conform with the criteria of the Army Corps of Engineers for a public hearing we submit the following *Evaluation Factors*. Please consider the following input on the need to renourish the beach at Haulover Beach Park as our reason for requesting a public hearing. Specifically, the northern end of the beach at Haulover Beach Park. Our association members and the general public have been using this beach in increasing numbers for the past 9 years. We have witnessed the gradual erosion of the beach and estimate over 50 feet or more of beach has eroded during this time. This erosion has been caused by hurricanes, severe storms and other natural phenomenon including tides and natures normal beach erosion.

# This beach meets the criteria for calling a public hearing and for sand replenishment for the following reasons:

\* General Environmental Concerns. The erosion over the past 10 years has endangered the protected sand dune and sea grape areas. It brings the ocean closer to Evacuation Route A1A and endangers the escape route during a storm of hurricane proportions. If not renourished, it will endanger the planned renourishment of Sunny Isles Beach. Haulover, by having a shoreline over 100 feet west of the planned Sunny Isles Beach shoreline, would cause the rapid movement and erosion of the Sunny Isles Beach, by causing the sand to migrate south. This movement would jeopardize the integrity of the Sunny Isles Beach sand renourishment project on its most southern boundary thus voiding its intended purpose. This would have a domino effect on the whole of Sunny Isles Beachs'.

mdcg82



Mr. Duck Army Corps 2/29/00 page 2

#### \* Fish and Wildlife Values.

Haulover Beach Park is an important spawning ground for sea turtles and they must have an adequate size beach in which to lay their eggs.

#### \* Flood Hazards.

The beach at its present size may not be able to prevent flood waters created by ocean storms from washing over "Evacuation Route" A1A.

#### \* Land Use.

Haulover Beach Park is a major regional park within the park system of Miami-Dade County and is one of the few oceanfront parks left in Miami-Dade County. With the build out of all the land north and south of Haulover Beach Park, this is the last remaining beach/park area available to the public. Its current land use should be protected by beach renourishment and preserved.

#### \* Shoreline Erosion and Accretion.

The shoreline has had substantial erosion. Sand renourishment is needed to restore the shoreline so that it will be on an equal distance from the county's landside survey line which runs from the south end of Miami Beach Government Cut to the north boundary of Sunny Isles Beach. This renourishment is needed to protect the integrity of all the other beach renourishment projects on this shoreline.

#### \* Recreation.

The northern 1/4 mile of Haulover Beach Park now sees over 1.1 million visitors a year. It is the most popular recreational beach in Miami Dade County. The beach renourishment is needed to enable the beach visitors to have sufficient room to recreate in less crowded conditions. Many of these visitors are tourists from out side of Miami-Dade County. "Wider is Better."

#### \* Economics.

The economic benefits of beach renourishment to Miami-Dade County, Broward County, South Florida, Florida and the United States can best be verified by a survey of the people using Haulover Beach Park. There are many tourists from all over the world and they purchase local condos, rent local apartments seasonally, stay at area hotels, eat at area restaurants and shop here. Their contributions are, they pay taxes, create jobs and are a return on the investment of local, state and United States dollars spent to attract tourists to the area.

#### \* Safety.

The renourishment of Haulover Beach will contribute to the safety of the area. A wider beach is a safer beach. The protection of "Evacuation Route" A1A is of paramount importance. This route is important to the residence of Bal Harbour and Sunny Isles as an escape route in an mandatory evacuation.



Mr. Duck Army Corps 2/29/00 page 3

# \* Property Ownership.

The beach sand renourishment project is important to protect the property of Miami-Dade County. The buildings at Haulover Beach include a main LifeGuard Station with police radio access and 30 lifeguard towers, a Miami-Dade County Police sub-station, and a Miami-Dade County Fire Rescue. The Fire Rescue unit is the one that the residents of Bal Harbour, Surfside, and Sunny Isles Beach must rely on, for both primary and back-up fire rescue service.

As you can see by the previously stated facts, the sand renourishment of Haulover Beach Park is an important project for metropolitan Miami-Dade County. It is not an isolated project, but a link in the chain of all the other beach renourishment projects the Army Corps of Engineers has completed and have planned on the coastline of Miami-Dade County.

We believe that the renourishment of Haulover Beach Park is important to the integrity of the Sunny Isles Beach renourishment project as well. After careful review, we believe the Army Corps of Engineers will agree with our assessment and will further see that the needs of Haulover Beach Park meet your citeria for beach renourishment.

Attached, please find 89 Petition sheets containing over 440 signatures requesting the renourishment of Haulover Beach Park.

We therefore respectfully request that you move forward on the process of renourishing Haulover Beach Park by preparing an Environmental Assessment (EA) and calling for a public hearing on the matter.

We further request the extention of the imput period. We did not receive your notice, which is dated February 3, 2000 until February 14th and believe in fairness, the period for input should be opened for an additional two week period.

Please advise of your decision. We thank you in advance for your considerations and efforts of behalf of the citizens of Miami-Dade County and the users of Haulover Beach Park.

Sincerely.

Richard Mason, Director

Chair, Community Relations and

Government Affairs

South Florida Free Beaches., Inc.

Florida Naturist Association

attachments mdcg84



Planning Division Environmental Branch

FEB 29 2000

Mr. James J. Slack U.S. Fish and Wildlife Service South Florida Ecosystems Office Post Office Box 2676 Vero Beach, Florida 32961-2676

Dear Mr. Slack:

This is in reference to the Dade County Beach Erosion Control and Hurricane Protection Project and the proposed renourishment at Haulover Beach Park. The project is described in a public notice dated February 3, 2000, which was previously sent to your office.

The Biological Opinion (BO) dated October 24, 1996, for Region III of the Coast of Florida Erosion and Storm Effects Study includes the project area considered for the Haulover Beach Park renourishment. We believe the reasonable and prudent measures, and terms and conditions listed in the BO for Dade County apply to the proposed renourishment. We plan to incorporate these requirements into the project plans and specifications, and any contracts as appropriate.

Your written concurrence on this determination is requested. If you have any questions or need further information, please contact Mr. Mike Dupes of my staff at 904-232-1689.

Sincerely,

James C. Duck Chief, Planning Division

CF: Mr. Chuck Sultzman, U.S. Fish and Wildlife Service, Post Office Box 2676, Vero Beach, Florida 32961-2676

bcc:

CESAJ-DP-I (Stevens)



# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office 9721 Executive Center Drive North St. Petersburg, Florida 33702

February 28, 2000

Mr. James C. Duck Chief, Planning Division Department of the Army, Corps of Engineers Planning Division, Environmental Branch P.O. Box 4970 Jacksonville, Florida 32232-0019

Dear Colonel Miller:

The National Marine Fisheries Service (NMFS) has reviewed the public notice dated February 3, 2000, requesting comments for the proposed renourishment of the Haulover Beach Park segment of the Dade County Beach Erosion Control and Hurricane Protection Project on the Atlantic Ocean, Dade County, Florida.

The information supplied in the letter generally outlines the Proposed Action for the project and location, as well as several alternatives. However, detailed information concerning the impacts to aquatic resources and measures of avoidance and minimization for the Proposed Action and each alternative was not provided. Therefore, we have no specific comment to provide at this time. The NMFS will be available to review the Environmental Assessment for the project when it is completed.

Thank you for your consideration of our comments. If you have questions, please contact Michael Johnson in Miami, Florida at 305/595-8352.

Sincerely,

Assistant Regional Administrator Habitat Conservation Division

cc: EPA,WPB DEP,WPB FFWCC,TALL FWS,VERO F/SER4 F/SER43-JOHNSON



#### DIVISIONS OF FLORIDA DEPARTMENT OF STATE

Office of the Secretary Office of International Relations Division of Elections Division of Corporations Division of Cultural Affairs Division of Historical Resources Division of Library and Information Services Division of Licensing Division of Administrative Services



# FLORIDA DEPARTMENT OF STATE Katherine Harris

Secretary of State

#### DIVISION OF HISTORICAL RESOURCES

February 8, 2000

Mr. James C. Duck Planning Division, Environmental Branch Jacksonville District, Corps of Engineers P.O. Box 4970 Jacksonville, Florida 32232-0019

RE:

DHR Project File No. 2000-01055

Cultural Resource Assessment Request

Renourishment at Haulover Beach Park Dade County Beach Erosion Control

and Hurricane Protection Project

Dade County, Florida

Dear Mr. Duck:

In accordance with the procedures contained in 36 C.F.R., Part 800 ("Protection of Historic Properties"), we have reviewed the referenced project for possible impact to historic properties listed, or eligible for listing, in the National Register of Historic Places. The authority for this procedure is the National Historic Preservation Act of 1966 (Public Law 89-665), as amended.

We have reviewed of the Florida Master Site File and our records and no historic properties are known to exist in the area of potential effect. Therefore, based on the information provided, it is the opinion of this office that no historic properties will be affected by this undertaking.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservation Planner, at 850-487-2333 or 800-847-7278. Your interest in protecting Florida's historic properties is appreciated.

Sincerely,

Snyder Matthews, Ph.D., Director

Leyber Partition

Division of Historical Resources State Historic Preservation Officer

JSM/Ese

MEMBER OF THE FLORIDA CABINET

Trustees of the Internal Improvement Trust Fund

Florida Land and Water Adjudicatory Commission

Department of Highway Safety and Motor Vehicles

State Board of Education

Siting Board Division of Bond Finance

Department of Revenue

Department of Law Enforcement

Department of Veterans' Affairs

Administration Commission



# DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS P. O. BOX 4970 JACKSONVILLE, FLORIDA 32232-0019

Planning Division Environmental Branch FEB 0 3 2000

# PUBLIC NOTICE

# RENOURISHMENT AT HAULOVER BEACH PARK DADE COUNTY BEACH EROSION CONTROL AND HURRICANE PROTECTION PROJECT

TO ADDRESSEES ON THE ENCLOSED LIST:

The Jacksonville District, U.S. Army Corps of Engineers is providing the enclosed public notice concerning the renourishment of the Haulover Beach Park segment of the Dade County Beach Erosion Control and Hurricane Protection Project.

We welcome your views, comments and information about the project. Your input should be provided as indicated in the enclosed public notice.

Sincerely,

James C. Duck

Chief, Planning Division

mes C. Doch

Enclosure

# LIST OF ADDRESSES FOR PUBLIC NOTICE

(33 CFR 325.3(d) & 337.1(c))

(Detailed List in Project Records)

- 1) distribution for posting in post offices or other appropriate public places in the vicinity of the site of the proposed work,
- 2) appropriate city and county officials,
- 3) adjoining property owners,
- 4) appropriate state agencies,
- 5) appropriate Indian Tribes or tribal representatives,
- 6) concerned Federal agencies,
- 7) local, regional and national shipping and other concerned business and conservation organizations,
- 8) appropriate River Basin Commissions,
- 9) appropriate state and areawide clearing houses as prescribed by OMB Circular A-95,
- 10) local news media,
- 11) any other interested party,
- 12) all parties who have specifically requested copies of public notices,
- 13) the U.S. Senators and Representatives for the area where the work is to be performed,
- 14) the field representative of the Secretary of the Interior,
- 15) the Regional Director of the Fish and Wildlife Service,
- 16) the Regional Director of the National Park Service,
- 17) the Regional Administrator of the Environmental Protection Agency,
- 18) the Regional Director of the National Marine Fisheries Service,
- 19) the head of the state agency responsible for fish and wildlife resources,
- 20) the State Historic Preservation Officer
- 21) the District Commander, U.S. Coast Guard

# PUBLIC NOTICE RENOURISHMENT OF THE HAULOVER BEACH PARK SEGMENT DADE COUNTY BEACH EROSION CONTROL AND HURRICANE PROTECTION PROJECT

#### PUBLIC NOTICE AUTHORITY:

Section 404 of the Clean Water Act (33 U.S.C. 1344). This public notice is being issued in accordance with Corps of Engineers Regulations concerning Civil Works Projects (part 7-64 b of ER 1105-2-100). This notice complies with Corps policy concerning public notice of Civil Works projects relative to Section 404 of the Clean Water Act.

Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 as Amended (33 U.S.C. 1314). This notice will also satisfy any public notice requirements relative to Section 103 of this act as it may apply to this project (part 7-69 of ER 1105-2-100).

POINT OF CONTACT FOR ADDITIONAL INFORMATION: Submit comments to Mr. James C. Duck, Chief, Planning Division, Jacksonville District Corps of Engineers, P.O. Box 4970, Jacksonville, Florida, 32232-0019, fax (904) 232-3442. For additional information, contact Mr. Mike Dupes at (904) 232-1689 or at the fax number above.

#### PROJECT AUTHORITY:

Initial Authorization. The Beach Erosion Control and Hurricane Protection (BEC & HP) Project for Dade County, Florida was authorized by the Flood Control Act of 1968 (see figure 1, location map). In addition, Section 69 of the 1974 Water Resources Act (P.L. 93-251 dated 7 March 1974) included the initial construction by non-Federal interests of the 0.85-mile segment along Bal Harbour Village, immediately south of Bakers Haulover Inlet. The authorized project, as described in HD 335/90/2, provided for the construction of a protective/recreational beach and a protective dune for 9.3 miles of shoreline between Government Cut and

Baker's Haulover Inlet (encompassing Miami Beach, Surfside and Bal Harbour) and for the construction of a protective/recreational beach along the 1.2 miles of shoreline at Haulover Beach Park.

Supplemental Appropriation. The Supplemental Appropriations Act of 1985 and the Water Resources Development Act of 1986 (Public Law 99-662) provided authority for extending the northern limit of the authorized project to include the construction of a protective beach along the 2.5 mile reach of shoreline north of Haulover Beach Park (Sunny Isles) and for periodic nourishment of the new beach. This authority also provided for the extension of the period of Federal participation in the cost of nourishing the authorized 1968 BEC & HP Project for Dade County, which covered 10.5 miles of shoreline extending from Government Cut north to the northern boundary of Haulover Beach Park, from 10 years to the 50-year life of the project.

<u>Project Purpose</u>. The purpose of the project is to prevent or reduce loss of public beachfront to continuing erosional forces and to prevent or reduce periodic damages and potential risk to life, health, and property in the developed lands adjacent to the beach.

#### PROJECT DESCRIPTION AND LOCATION:

Proposed Action. The placement of about 114,000 cubic yards of material would be required along the beach at Haulover Beach Park, Dade County, Florida. The beach fill would extend southward from the border with Sunny Isles, approximately 2,600 feet. Refer to figure 2 for a plan view of the fill area. The construction berm width is 120 feet from the ECL at an elevation of +9 feet mean low water (mlw), with a construction tolerance of +/-0.5 feet. The front slope of the fill will be 1 vertical

on 10 horizontal. Refer to figure 3 for a typical profile view.

Alternatives. Alternatives in addition to beach renourishment were considered in the 1975 GDM for the Dade County Beach Erosion Control and Hurricane Protection Project. The alternatives considered include a) implementing Hurricane warning and emergency flood mobilization; b) revising zoning regulations and existing building codes; c) raising existing bulkheads and seawalls; d) hurricane dunes; and e) groins. These alternatives are discussed below.

- a) Implementing hurricane warning and emergency flood mobilization is unrealistic for overall protection because mass evacuation requires an adequate preplanned emergency mobilization plan. Forecasts of the exact path of hurricane approach cannot usually be made with any great degree of accuracy until a short time prior to the arrival of the storm.
- b) "Hurricane proofing," where sufficient time exists before hurricane landfall, can reduce wind and rain damage but has no effect on tidal-flooding. Revised zoning regulations, more realistic bulkhead lines and minimum fill elevations would also have little effect on tidal flooding because of the advanced stage of development on the island.
- c) Without an adequate beach, seawalls would have to be so massive that they would be objectionable to waterfront property owners.
- d) Constructing a dune to a higher elevation would provide small additional benefits during a design hurricane occurrence in relation to the increase in costs.
- e) Costs of groin construction would exceed the cost of periodic nourishment, would not increase benefits, and are not economically justified.

Borrow Site. The proposed borrow site is located within the ebb tidal shoal northeast of Bakers Haulover Inlet in 15 to 20 feet of water (figure 4). Field investigations of this area have previously been performed by the USFWS, DERM and the Corps in

association with a proposed renourishment at Bal Harbour. A State Water Quality Certification application for the use of this borrow area is currently under review by the Florida Department of Environmental Protection (DEP).

Alternative Borrow Sites. Alternate borrow sites considered include distant sources, deep water sources (60 to 300 feet deep), borrow areas located south of Government Cut and upland sources.

PROJECT SCHEDULE: The proposed action is planned to occur during the summer/fall of 2001.

DRAWINGS: Figure 1 is enclosed as a project location map; figure 2 is a plan view of the fill area; figure 3 shows a typical beach profile; figure 4 shows the borrow site at Bakers Haulover Inlet ebb shoal.

RELATIONSHIP TO BASELINE OF TERRITORIAL SEA: All activities proposed would occur within 3 miles of the Florida coastline. A major purpose of the project is to prevent or reduce loss of public beach front to continuing erosional forces.

#### OTHER GOVERNMENT AUTHORIZATIONS:

Water Quality Certification. The project would cause temporary increases in turbidity at dredging and beach disposal sites. The State of Florida water quality regulations require that water quality standards not be violated during dredging operations. The standards state that turbidity outside the mixing zone shall not exceed 29 NTU's above background. Various protective measures and monitoring programs would be conducted during construction to ensure meeting state water quality criteria. Should turbidity exceed State water quality standards as determined by monitoring, the contractor would be required to cease work until conditions returned to normal. The U.S. Army Corps of Engineers has submitted an application for Water Quality Certification (WQC) to the Florida Department of Environmental Protection for the project. Any comments concerning water quality aspects of the proposed action should also be directed to:

Florida Department of Environmental Protection 3900 Commonwealth Boulevard Mail Stop 310 Tallahassee, Florida 32399-3000.

Compliance with Environmental Requirements. The following requirements have been or are being addressed for the project. Additional discussion is being included in the Environmental Assessment (see section below on NEPA documentation).

- 1) National Environmental Policy Act of 1969, as amended.
- 2) Endangered Species Act of 1973, as amended.
- 3) Fish and Wildlife Coordination Act of 1958, as amended.
- 4) National Historic Preservation Act of 1966, (PL 89-665) and the Archeology and Historic Preservation Act (PL 93-291).
- 5) Clean Water Act of 1972, as amended.
- 6) Clean Air Act of 1972, as amended.
- 7) Coastal Zone Management Act of 1972, as amended.
- 8) Farmland Protection Policy Act of 1981.
- 9) Wild and Scenic River Act of 1968, as amended.
- 10) Marine Mammal Protection Act of 1972, as amended.
- 11) Estuary Protection Act of 1968.
- 12) Federal Water Project Recreation Act, as amended.
- 13) Fishery Conservation and Management Act of 1976.
- 14) Submerged Lands Act of 1953.

- 15) Coastal Barrier Resources Act of 1972, as amended by the Coastal Barrier Improvement Act of 1990.
- 16) River and Harbor Act of 1899.
- 17) Anadromous Fish Conservation Act.
- 18) Migratory Bird Treaty Act and Migratory Bird Conservation Act.
- 19) Marine Protection, Research, and Sanctuaries Act of 1972.
- 20) <u>Magnuson Stevens Fishery Conservation and</u> Management Act.
- 21) E.O. 11990, Protection of Wetlands.
- 22) E.O. 11988, Flood Plain Management.
- 23) E.O. 12898, Environmental Justice.
- 24) E.O. 13089, Coral Reef Protection.

NEPA DOCUMENTATION: An Environmental Assessment (EA) will be prepared for the proposed action. The final EA would consider any information received as a result of this public notice. See section below on "Other Available Information" for availability of EA/FONSI.

HISTORIC PROPERTIES: Cultural resource investigations have been conducted for the proposed project. Information resulting from those investigations, as well as evidence of coordination with the Florida State Historic Preservation Officer (SHPO), will be included in the EA.

#### **ENDANGERED SPECIES:**

Proposed Project. Consultation with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service pursuant to the Endangered Species Act and the Fish and Wildlife Coordination Act is ongoing for the proposed action. We will consider the recommendations from the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for purposes of compliance with the Federal Endangered Species Act. Impacts on the manatee,

sea turtles, sea turtle nesting, and other species will be addressed.

Other Sand Sources. The use of other sand sources (upland, deep water, or distant ocean bottoms) would require additional consultation.

#### **EVALUATION FACTORS:**

General. The decision whether to pursue the proposed work or some alternative will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

Application of Guidelines, Section 404(b)(1) of the Clean Water Act. The EA will contain a preliminary evaluation for compliance with the guidelines pursuant to Section 404(b)(1) of the Clean Water Act (part 230 of Title 40 of the Code of Federal Regulations). A final determination of compliance will include consideration of the information received as a result of this notice, any public hearing, and other sources.

Application of Criteria, Section 102(a) of the Marine Protection, Research and Sanctuaries Act of 1972. If determined appropriate, the project will be evaluated with respect to the criteria for ocean dumping pursuant to Section 102(a) of the act (part 220 to 229 of Title 40 of the Code of Federal Regulations).

OTHER AVAILABLE INFORMATION: Following this notice, we will prepare an Environmental Assessment (EA), and, if appropriate, a Finding of No Significant Impact (FONSI). You may contact Mike Dupes at (904) 232-1689 concerning the availability of the EA. When completed, the EA (and FONSI, if appropriate) will be made available at the Miami Beach Branch Public Library, 2100 Collins Avenue, Miami Beach, Florida. The library hours are 10 a.m. to 8 p.m. on Monday and Wednesday and 10 a.m. to 5:30 p.m. on Tuesday, Thursday, and Saturday. The point of contact at the library is Gia Thompson at (305) 535-4219.

COMMENT PERIOD: Comments on this notice should be received within 30 days of the date of the notice. Comments should be addressed to the attention of Mr. James C. Duck, Chief, Planning Division at the above letterhead address.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified above, that a public hearing be held to consider the proposed action. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

CZM PLAN: Compliance would be achieved in combination with certification of water quality (see Other Governmental Authorizations above). The proposed activity will be undertaken in a manner consistent to the maximum extent practicable with the state coastal zone management program.

# COORDINATION WITH FEDERAL, STATE, AND LOCAL ENVIRONMENTAL AGENCIES:

The following environmental agencies have been or will be consulted concerning the proposed project.

- 1) U.S. Fish and Wildlife Service
- 2) National Marine Fisheries Service
- 3) Florida Department of Environmental Protection
- 4) Florida Fish and Wildlife Conservation Commission
- 5) State Historic Preservation Officer
- 6) U.S. Environmental Protection Agency

# LIST OF ENCLOSURES:

- Figure 1, Location of proposed action.
   Figure 2, Plan view of the beach fill area.
   Figure 3, Typical beach profile.
   Figure 4, Potential borrow site at Bakers Haulover Inlet ebb shoal.





